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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,587	11/06/2001	Kent Ryhorchuk	014940-002410US	9311

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EXAMINER	
PAYNE, DAVID C	

ART UNIT	PAPER NUMBER
2633	13

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,587	RYHORCHUK ET AL.	
	Examiner	Art Unit	
	David C. Payne	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 29 December 2003 have been fully considered but they are not persuasive.

2. Regarding applicant' s assertion that the Office Action of 28 August 2003 suggested removing the amplifier from the Merli node: Apparently, the applicant has not understood the argument as presented. Applicant has claimed an ' amplifier node.' In accordance with MPEP procedure, the examiner is required to assign claims their broadest reasonable interpretation. As such, it is deemed reasonable that a node that uses amplifiers, as does Merli, should be interpreted as an amplifier node. The applicant has not presented any claims that expressly require a more specific interpretation.

Regarding applicant' s claim that Merli teaches away from the applicant' s invention as disclosed in the Background section of the specification: Applicant is arguing characteristics of his invention that have not been claimed. In response to applicant's argument that the references fail to show certain

features of applicant' s invention, it is noted that the features upon which applicant relies (i.e., network manager free system) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. Regarding applicant' s assertion that messages are not communicated along supervisory channels in the Fee invention. Fee disclosed col. 5 lines 66,67 thru col. 6 lines 1-3, ' The element manager at station 17b **will form a message identifying the nature and location of the fault and pass that message** to each of the line supervisory modules at station 17b **for transmission on their associated optical supervisory channels.**' Thus, it is clear that Fee transmits fault information along supervisory channels. Furthermore, element managers are contained at each node and therefore constitute part of the fault management system at each node.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5, 8-12, 14, 17-19, 21, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. US 6,088,141 (Merli) in view of Fee et al. US 5,914,794 (Fee).

Re claims 1, 8-10, 17, 24-26

Merli disclosed,

A system for detecting faults in an optical network, comprising: a first node (figure 1a, 102) and a second node (figure 1a, 104); and an amplifier (figure 1a, 262 or 264) coupled between the first node and the second node, the node configured to detect a fault on an optical link connecting the node and the first node and generate a fault report upon detection of the fault (e.g., col/line: 6/5-20). Merli further disclosed detecting loss of power or loss of signal (e.g., col/line: 4/35-50, 6/5-10).

Merli does not distinguish separate amplifier nodes for detecting the fault but rather incorporates amplification into each node that detects the fault. It would have been obvious to one ordinary skill in the art at the time of invention that placing the amplification and detection in separate nodes is no different that combining the amplification with the local nodes. Making parts separable is not

patentable over the prior art.

Furthermore, the fault monitor (figure 2 #222) communicates with the network management system (116) but does not to forward the fault report to the second node.

Fee disclosed an optical ring with fault management that communicates with an element manager (figure 1 – 43) while the fault information is propagated along the supervisory channels (figure 1 – 21a-n, e.g., col/line: 5/60-67, 6/1-6, 2/20-25). Furthermore it would have been obvious to one of ordinary skill in the art at the time of invention that add the Fee fault forward capability to the Merli invention for the benefit of a robust and highly fault tolerant orthogonal (" bridge and ladder") detection and reporting system as discussed in Merli (e.g., col/line: 4/42-56).

Re claim 2, 11, 18

The system of Merli and Fee as discussed above is capable of forwarding error reports around failed nodes to nodes that are able to initiate a switching action to restore traffic thereby increasing fault tolerance (see Fee, e.g., col/line: 4/42-56).

Re claims 3, 12, 19, 27

The system of Merli and Fee as discussed above disclosed wherein the fault report is forwarded until

the fault report is received by a node which is capable of switching traffic. (see Fee, e.g., col/line: 5/61-67, 6/1-16).

Re claims 5, 14, 21

The system of Merli and Fee as discussed above disclosed wherein the amplifier (local node) is further configured to receive and pass a fault report from another amplifier node to the second node.(e.g., Fee, col/line: 5/60-67, 6/1-6, 2/20-25)

6. Claims 4, 6, 13, 15, 20, 22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. US 6,088,141 (Merli) and Fee et al. US 5,914,794 (Fee) as applied to claims 1, 10, 17 and 26 above, and further in view of Tada et al. US 5,532,862 (Tada).

Re claims 4, 6, 13, 15, 20, 22, 28

Merli and Fee do not disclose prioritizing faults. Tada disclosed a fault prioritization generation and forwarding method (). It would have been obvious to one of ordinary skill in the art at the time of invention to use the Tada fault priority method with the Merli and Fee system for the benefit efficiency and reduction of time required to restore traffic in a network as discussed by Tada (e.g., col/line: 2/55-65).

7. Claims 7, 16, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. US 6,088,141 (Merli) and Fee et al. US 5,914,794 (Fee) as applied to claims 1, 10, 17 and 26 above, and further in view of Cohen et al. US 4,736,359 (Cohen).

Re claims 7, 16, 23 and 29

Merli and Fee do not disclose wherein the optical network is a bi-directional line switched ring network. Cohen disclosed a bi-directional line switched ring network with fault prioritization (e.g., col/line: 1/35-40). It would have been obvious to one of ordinary skill in the art at the time of invention to use the Cohen bi-directional line switched ring network with the Merli and Fee system for the benefit of size and weight savings as discussed by Cohen (see. Col/line: 1/35-40).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner' s supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

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